

Survey of MP3 Usage:
Report on a University Consumption Community

Principal Investigator
Mark Latonero
latonero@usc.edu

The Norman Lear Center
Annenberg School for Communication
University of Southern California

June 2000

This study was supported by a grant from the USC Annenberg School for Communication where Mark Latonero is a doctoral candidate. He would like to thank Johanna Blakley, Geoffrey Cowan, William Dutton, Judson Ferdon, Jennifer Gibbs, Phil Graham, Steve Jones, Martin Kaplan, Titus Levi, Sorin Matei, Shannon McConville, Tim McKeon, Jordan Raphael, Patti Riley, Sandra Ball-Rokeach, Marita Sturken, and Chris Weare.

Executive Summary

A month ago, the University of Southern California (USC) banned Napster amid speculation of widespread copyright violations and threatening litigation. The present study reveals empirical evidence about a burgeoning microcosm of MP3 users in the university community. This survey of USC students provides a snapshot of the attitudes, characteristics, and practices of MP3 users, covering everything from the number of MP3s that students download per week, to student opinion of Metallica in the wake of the band's initial lawsuit against Napster, USC, Yale, and Indiana University.

By looking at how students actually *consume* MP3s, these findings contradict many music industry fears about the dangers posed by MP3 and other digital technologies. MP3 file sharing is wildly popular, but contrary to most media reports, the majority of students surveyed are still willing to pay for recorded music. The study found little persuasive evidence to indicate that students' aggregate use of MP3 technologies has been harmful to either the recording industry or artists.

The most salient results show the following:

- MP3 is a major new phenomenon in the university population sampled: 69% of all students surveyed say they download MP3s; of these, 68% use Napster. Seventy percent of MP3 users say they learned about MP3 technology through close social networks of family and/or friends.
- Unsurprisingly, there is a strong correlation between MP3 usage and access to faster Internet connections.
- MP3 usage among students has not significantly reduced their CD consumption patterns. Most students (63%) who download MP3s say they are still buying the same number of CDs; 10 % of MP3 users say they are buying more CDs. What's more, 39% of students who download MP3s say that after listening to recorded music in MP3 format, they often buy CDs containing that music. Students also rated CDs higher than MP3s with respect to sound quality.
- Sharing music files is a popular activity, but 68% of students sampled who download MP3s say they have never converted CD music to MP3 format; 70% have never uploaded MP3s to the Internet.
- Thirty-three percent of students interviewed say their opinion of Metallica has worsened since the lawsuit.
- Fifty-four percent of students surveyed disagree with USC's ban on Napster downloads.
- Sixty-nine percent of students surveyed agree that copyright holders should be paid for downloaded MP3s.
- Seventy-six percent of respondents say that society is better off with new technologies such as MP3.

University students form an elite, computer savvy community in our information society. They also have easy access to high-speed Internet connections and well-developed communication channels to learn about new technologies. Moreover, students' high demand for music products makes this study a fitting exploration of the impact new music technologies have on our economic, social, and cultural landscape.

Methodology

This study's design was approved by the USC University Park Institutional Review Board. A standardized questionnaire was constructed to measure key variables of a media consumption community composed of USC students. USC is a large, urban research university located in Los Angeles, California. Based on 1998-1999 data, USC has a total enrollment of 28,700 students. The USC student body is ethnically diverse, split evenly between both genders, and includes a large international population.

The sample frame consists of 3,300 USC students living in the immediate vicinity of the University Park (main) campus. This group was chosen to investigate the research hypothesis that students with proximate access to university centers form a community of digital elites, familiar with new technologies like MP3. Roughly one-half of the students in the sample frame live in university housing (both on-campus and off-campus); many of these students have Ethernet-ready connections in their rooms. Half of the students occupy private, off-campus non-university housing. Sampling remained even between these two groups.

The 46-question survey was administered by a private research firm, using standard telephone interviews with CATI (Computer Assisted Telephone Interviewing). The fieldwork was conducted over a 4-day period, which ended Monday, May 8, 2000. A probability sample was drawn from the sample frame using a random digit dialing protocol. The total number of completed responses was 275 with a response rate of 86%. The composition of students completing the survey reflected the demographic characteristics of the university student body. Based on the sample size, the margin of error for most estimates is approximately (+/-) 2.5%.

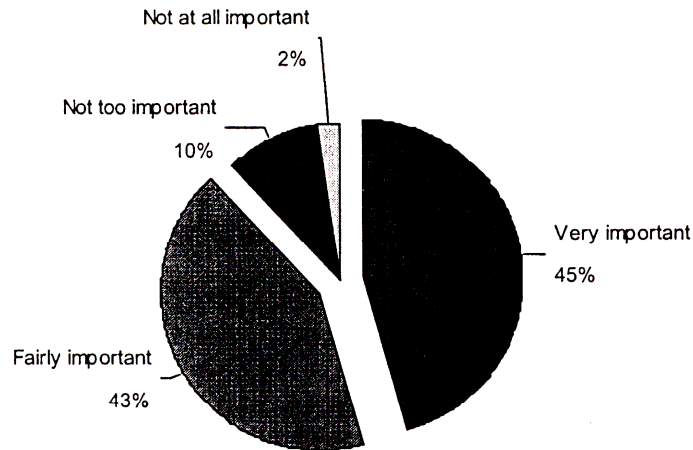
Results

List of findings:

- p. 5 Graph 1: Importance of music in students' lives
 Graph 2: Attitudes towards CD pricing
- p. 6 Graph 3: CD consumption patterns
 Graph 4: Demand factors: Time spent per day using the computer and Internet
 Time spent per day listening to recorded music and music on a computer
- p. 7 Graph 5: Familiarity with computers and the Internet
 Graph 6: Access to computers and the Internet
- p.8 Graph 7: Awareness of MP3
 Graph 8: Percentage of MP3 users and Napster users
- p. 9 Graph 9: MP3 usage correlated with access to faster Internet connections
 Graph 10: Location of MP3 downloading
- p.10 Graph 11: Length of time student has been downloading MP3s
 Graph 12: Number of MP3 downloads per week
 Ease/difficulty of finding MP3s
- p. 11 Graph 13: Percentage of those converting CDs to MP3s
 Percentage of those uploading MP3s to the Internet
 Graph 14: Number of MP3s downloaded from Napster
- p. 12 Graph 15: Changes in CD buying patterns of MP3 users
 Graph 16: Relationship between CD buying patterns and MP3 users/nonusers
 Relationship between CD buying patterns and MP3s downloaded per week
- p. 13 Graph17: Likelihood of purchasing CDs after listening to MP3s
 Graph 18: Rating of CD sound quality versus MP3 sound quality
- p. 14 Graph 19: Attitudes towards payments to copyright holders
 Graph 20: Attitudes towards USC Napster ban
- p. 15 Graph 21: Attitudes towards Metallica after lawsuit
 Graph 22: Attitudes towards technologies like MP3

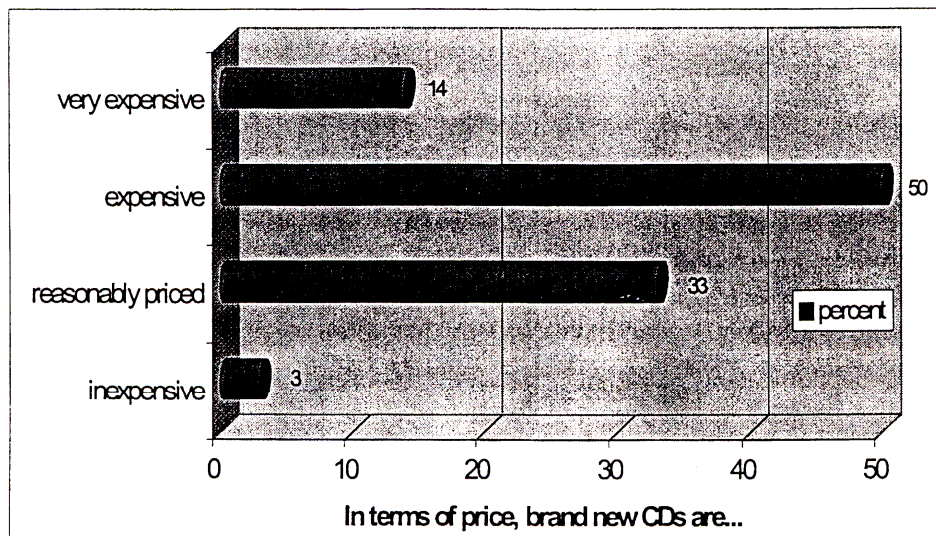
NOTE: Many estimates of percentages are rounded and missing values are omitted on graphs.

1) The vast majority of students surveyed consider music to play an *important* role in their lives. Forty-six percent of all respondents say music plays a “very important” role; 43% say “fairly important.”

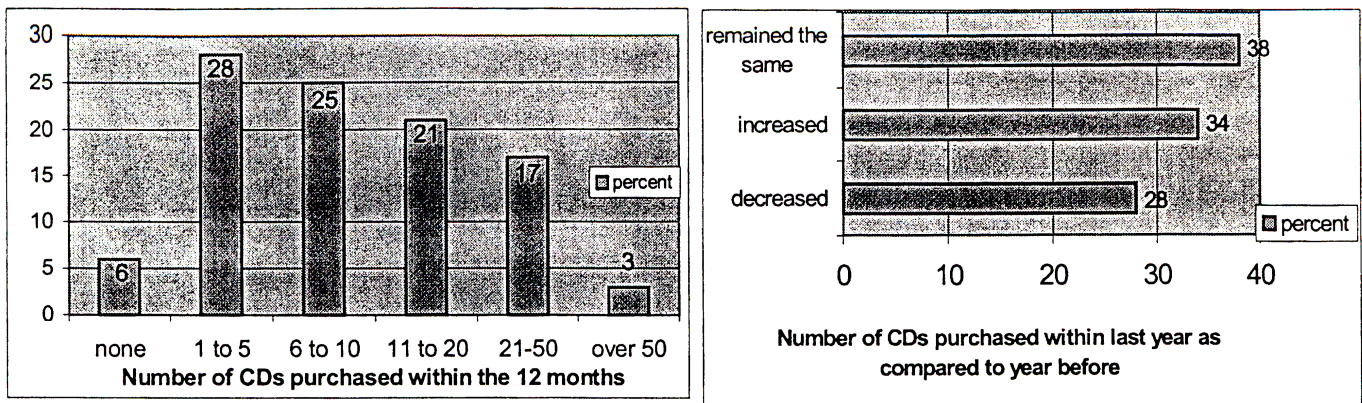


How important a role does music play in your life?

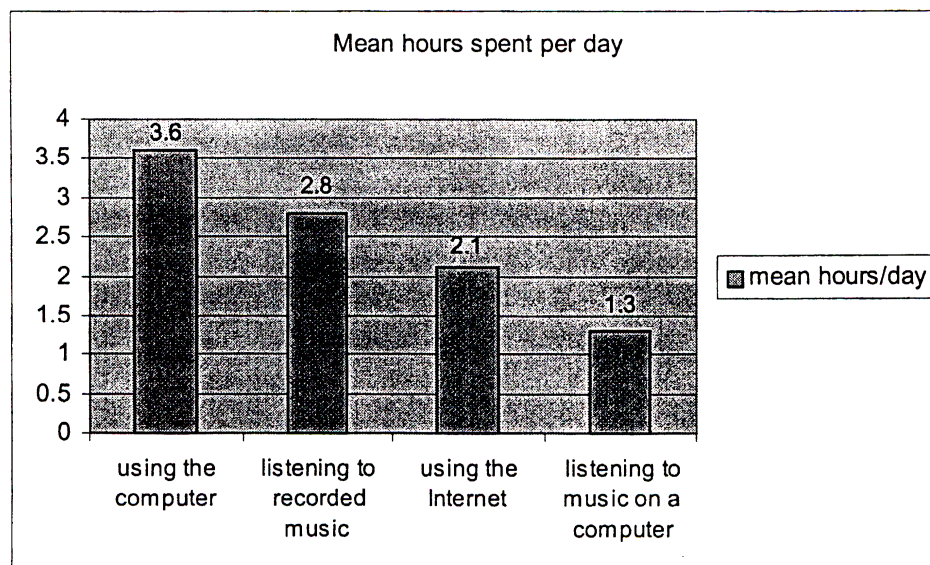
2) Sixty-four percent of all students surveyed feel that CDs are *expensive*.



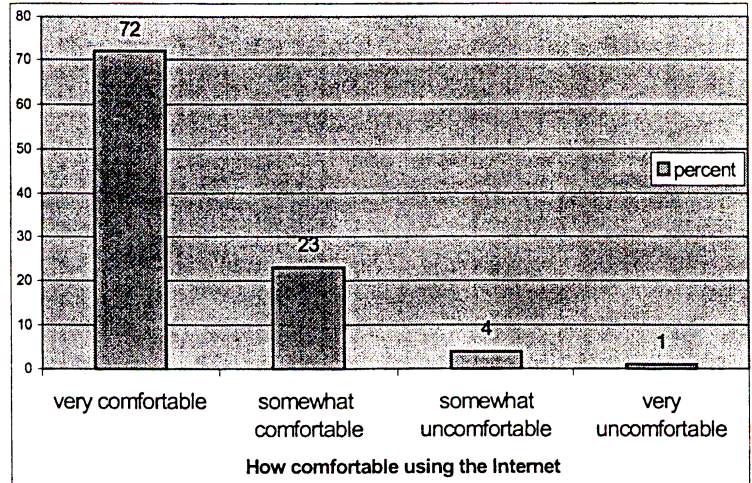
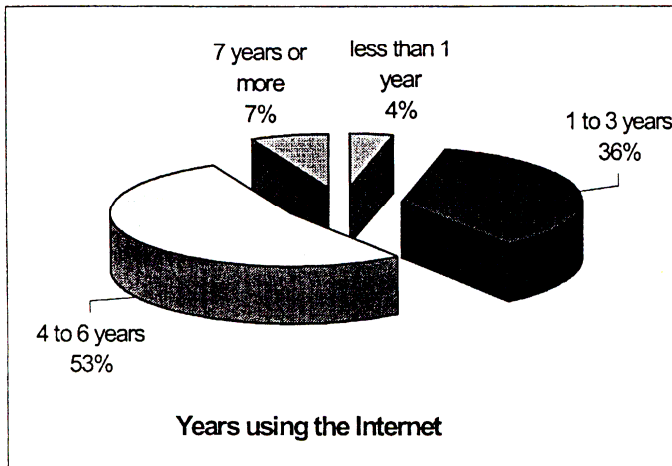
3) Despite attitudes towards pricing, students surveyed are still buying CDs. Fifty-three percent of all respondents purchased 1-10 CDs in the last year. Thirty-four percent of respondents purchased *more* CDs within the last year compared to the year before.



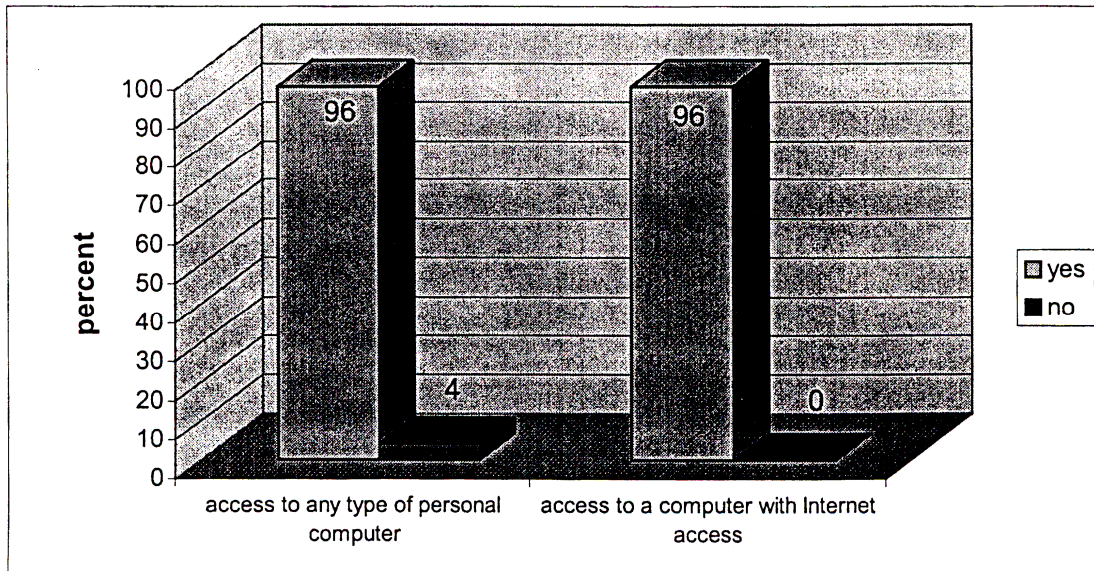
4) Study demonstrates student demands in the attention economy. Students reported time spent per day on each of the activities below. In addition, 91% of all respondents reported that they have listened to music on a computer. Note: “Recorded music” was specified to mean CDs, tapes, or music other than from radio or television. “Music on a computer” was specified to mean from the CD-ROM drive, streaming audio from the Internet, etc.



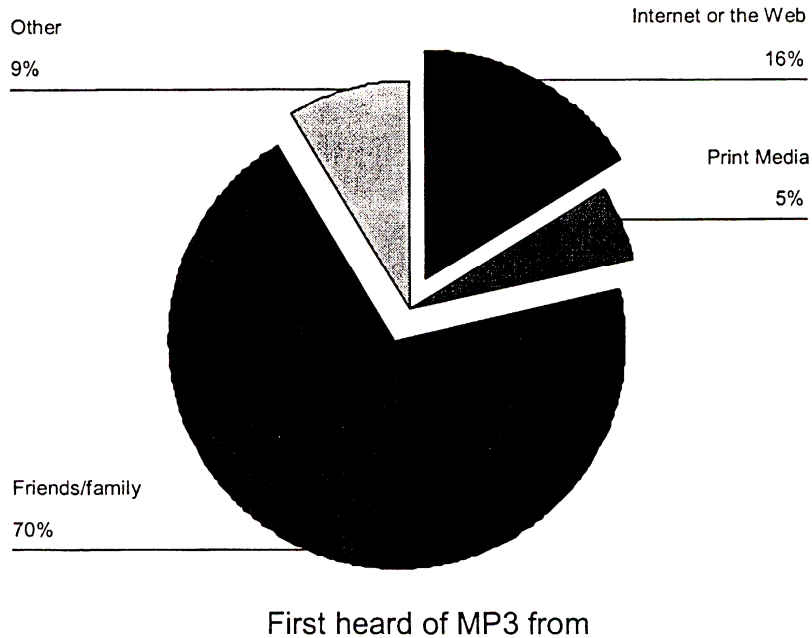
5) The university student community is technologically savvy. Of all students surveyed, 72% say they feel “very comfortable using computers.” Fifty-three percent of all respondents say they have been using the Internet for 4-6 years, 36% for 1-3 years.



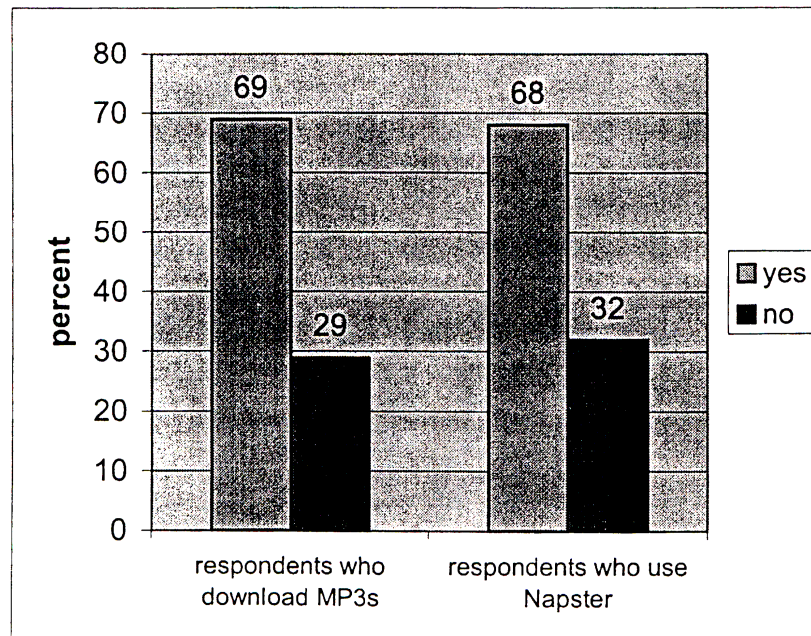
6) Nearly all students surveyed have regular access to computers and the Internet. In addition, 70% of respondents reported that USC pays for their Internet access.



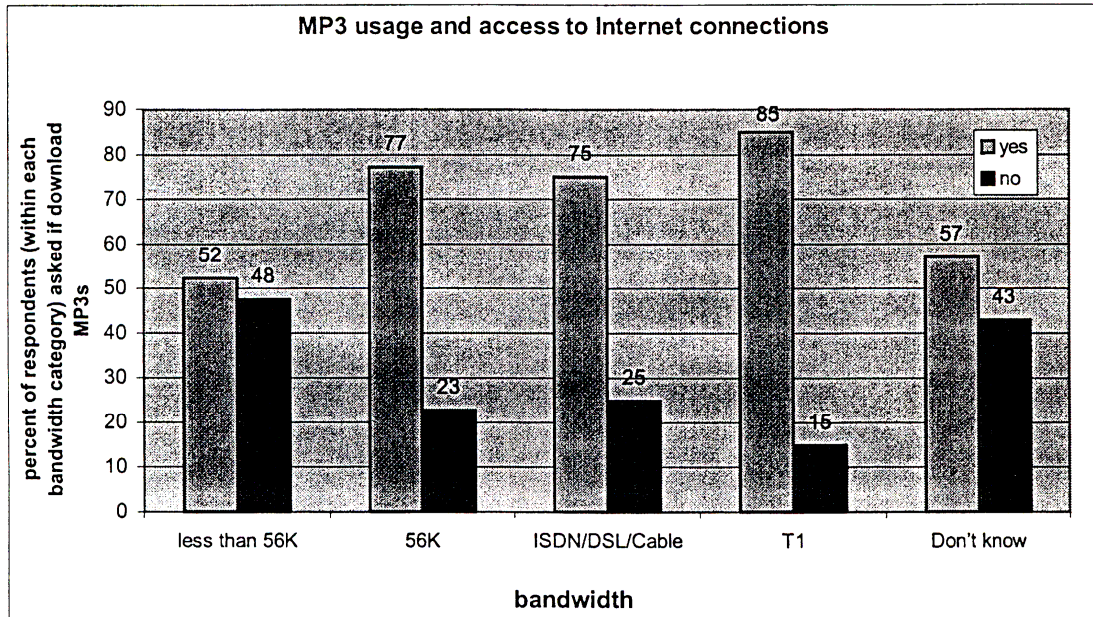
7) Close social networks spread awareness of MP3. Ninety-seven percent of respondents reported that they have heard of MP3. Of these, 70% say that they first heard of MP3 from family and/or friends.



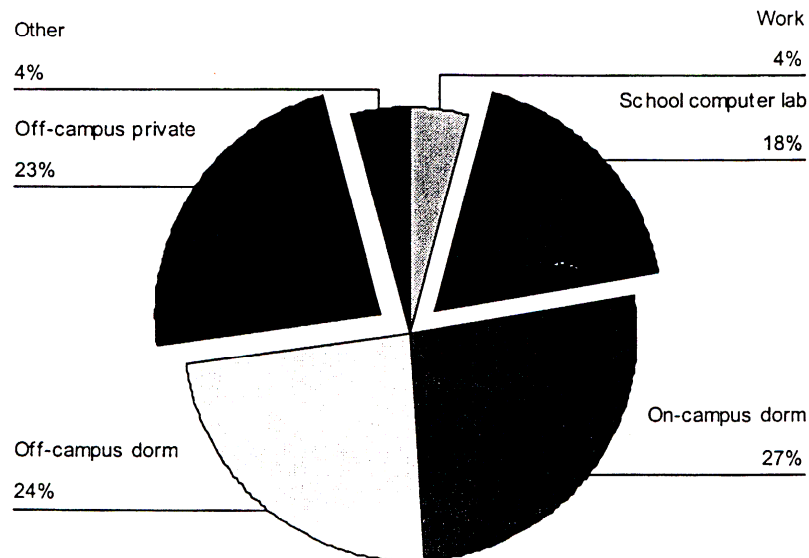
8) Downloading of MP3s and Napster use is *widespread* among the student population. Sixty-nine percent of all USC students interviewed say they have downloaded an MP3 music file from the Internet. Of these respondents who download MP3s, 68% also use Napster.



9) **MP3 usage is highly correlated with access to faster Internet connections.** Eighty-five percent of respondents with regular access to T1 connections have downloaded MP3s, compared to 75% with ISDN/DSL/Cable connections, 77% with 56K modems, and 52% with modems slower than 56K.

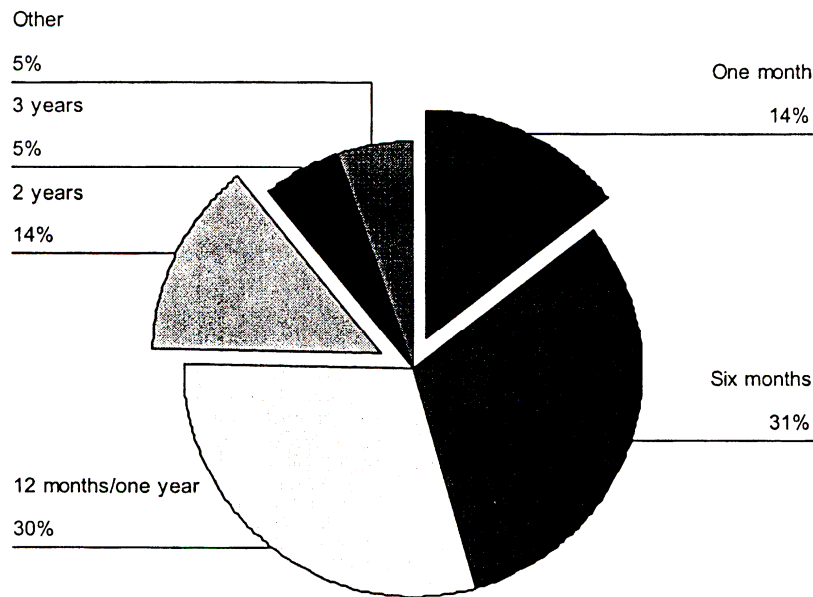


10) **Of the students who download MP3s, 51% download from on-campus or off-campus *university housing*.**



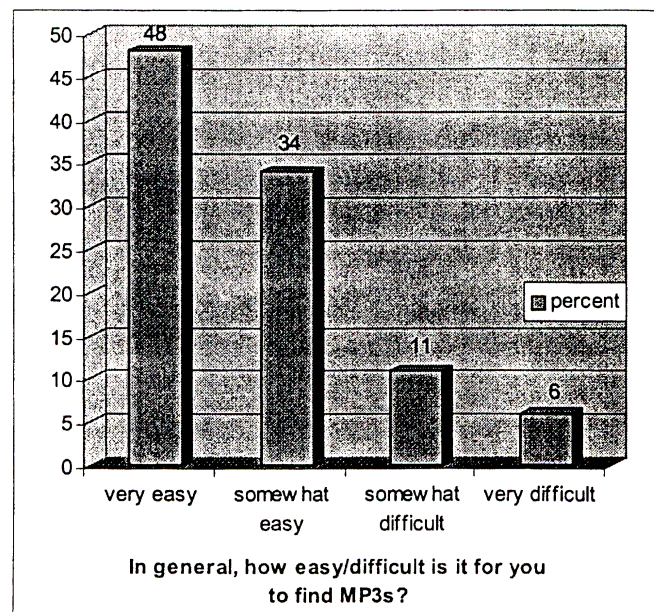
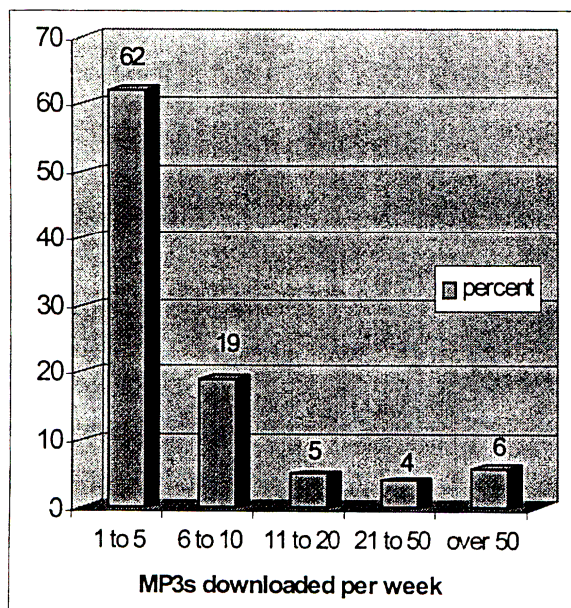
Where do you spend the most time downloading MP3s?

11) Sixty-one percent of respondents who are MP3 users have been downloading MP3s from 6 months to 1 year.

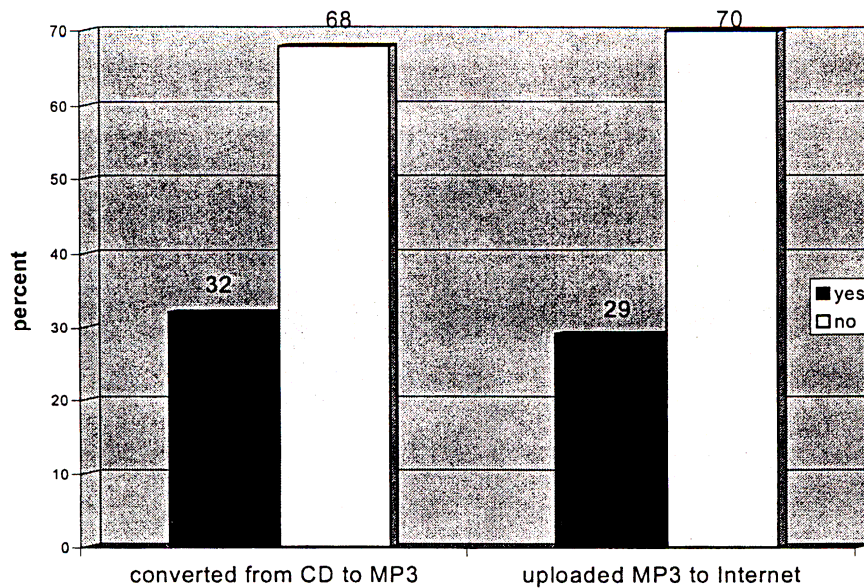


How long have you been downloading MP3s?

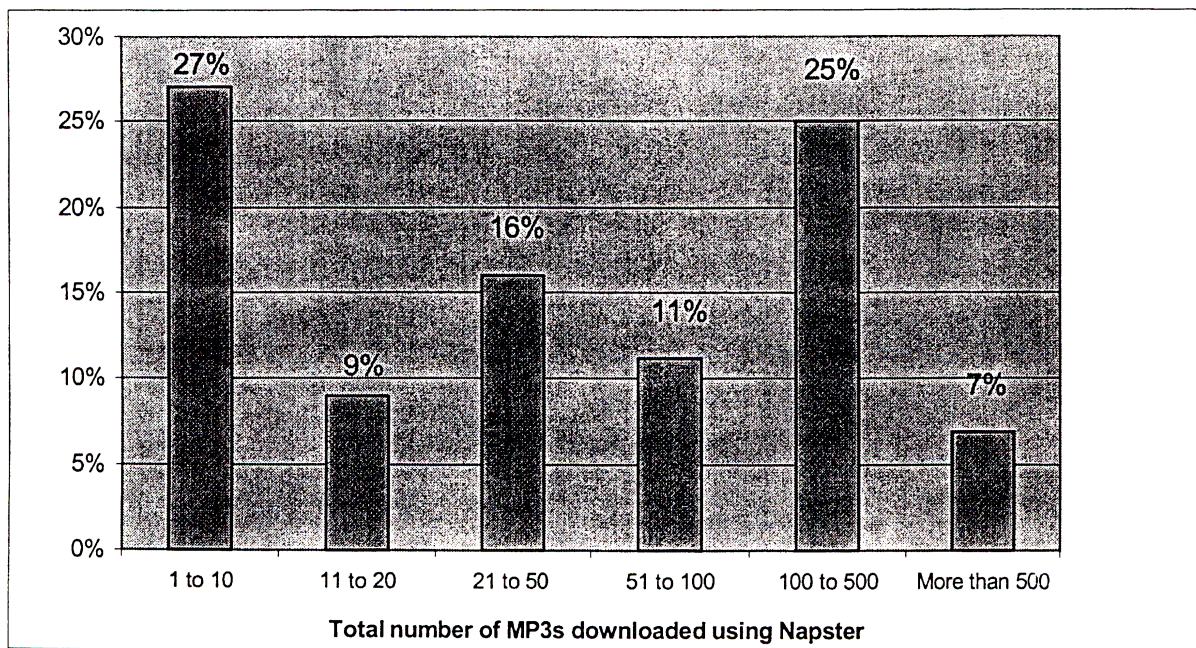
12) Sixty-two percent of respondents who are MP3 users download 1-5 MP3s per week. Eighty-two percent of MP3 users interviewed say finding MP3s is easy.



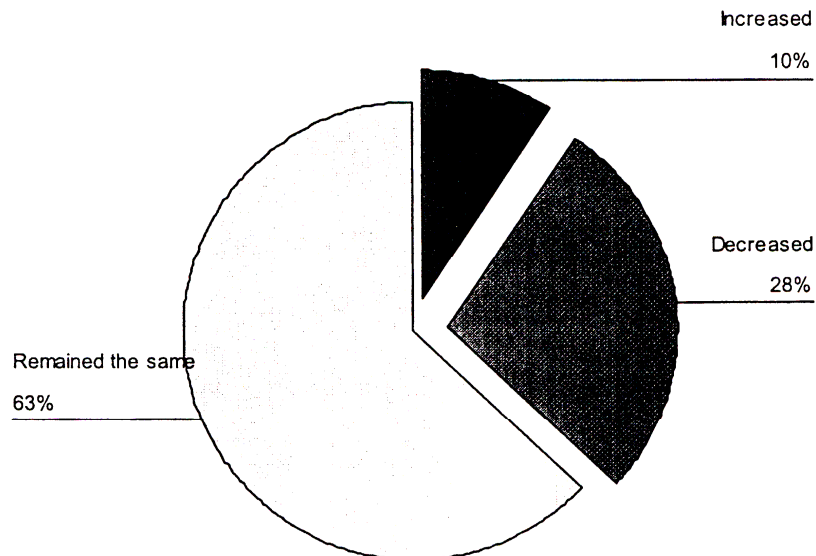
13) Sixty-eight percent of respondents who download MP3s have never *converted* a song from a CD to an MP3 file. Seventy percent of respondents who download MP3s have never *uploaded* an MP3 onto the Internet.



14) For respondents who use Napster, 27% are light users while 25% are heavy users. Of all respondents who use Napster, 27% have downloaded 1-10 MP3s from Napster; 25% have downloaded 100-500 MP3s from Napster.

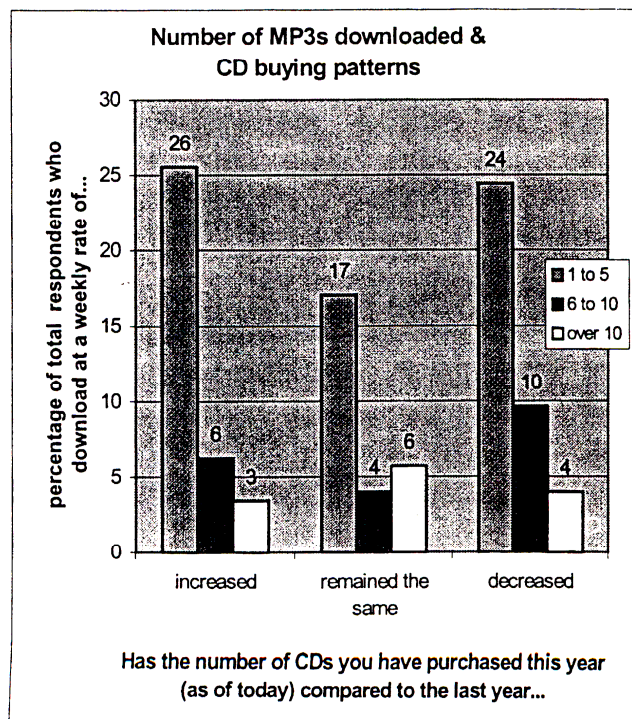
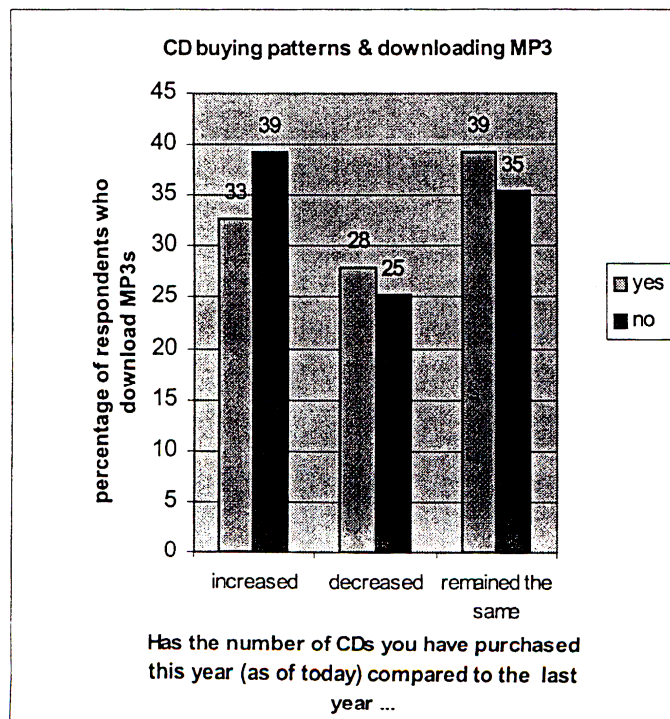


15) The majority of respondents who download MP3s still *buy* CDs. Sixty-three percent of students surveyed who download MP3s say that the number of CDs they purchase has remained the same.

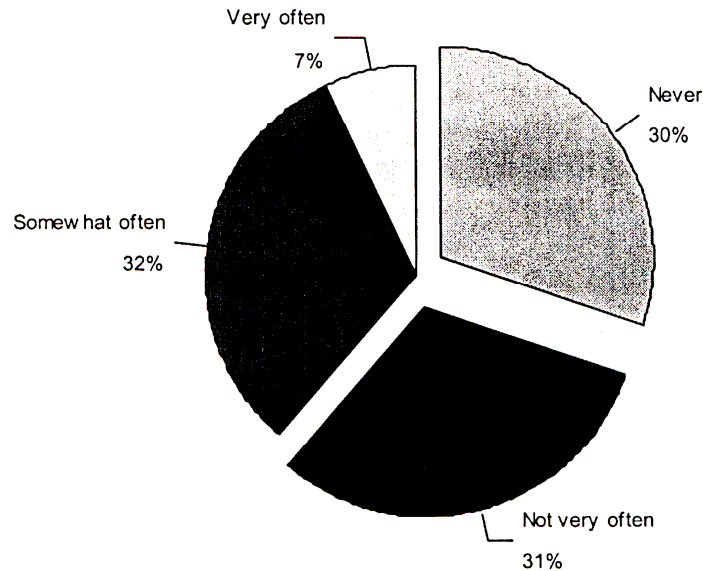


Since downloading MP3s has the number of CDs you have purchased...

16) MP3 usage among students surveyed does not significantly affect CD buying patterns. While slight variations can be seen below, none of these are statistically significant, which suggests that neither MP3 usage nor number of MP3s downloaded per week affects CD purchasing.

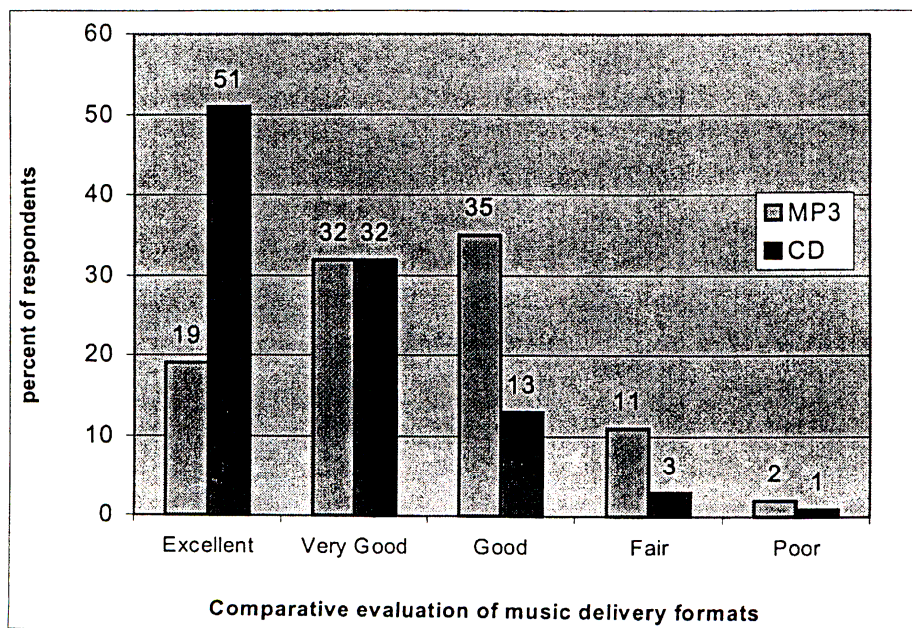


17) Thirty-nine percent of respondents who download MP3s often listen to MP3 songs before *buying* the CD.

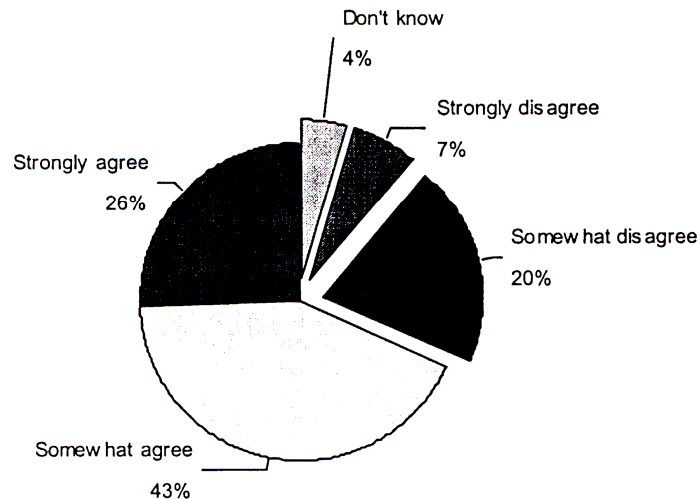


How often do you listen to the MP3 then buy the CD that has that song?

18) Respondents say CDs have *better* sound quality than MP3s. The graph below compares 2 groups: All respondents surveyed were asked to rate CD sound quality, and respondents who download MP3s were asked to rate MP3 sound quality. Fifty-one percent of all respondents say that CDs have excellent sound quality, compared to 19% of MP3 users who say MP3s have excellent sound quality. Thirty-two percent of all respondents, and 32% of respondents who are MP3 listeners, consider CDs and MP3s to have "very good" sound quality.

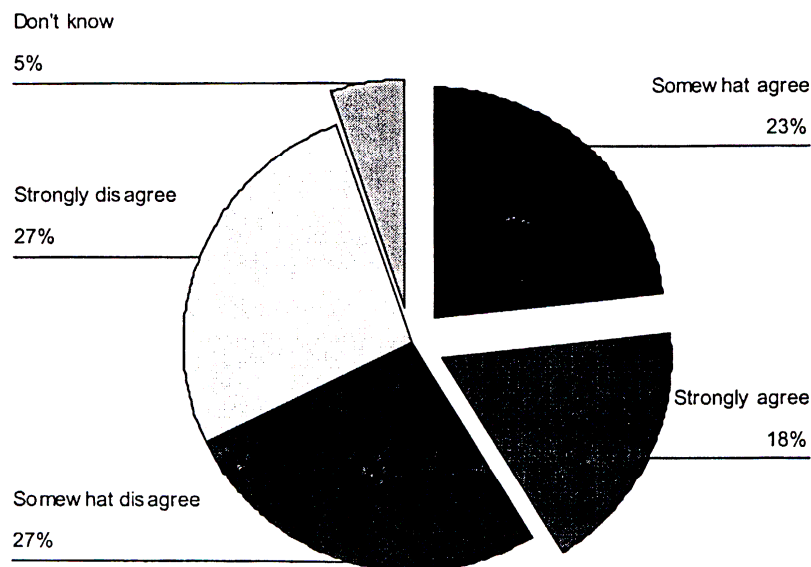


19) Sixty-nine percent of all students surveyed *agree* that copyright owners should be paid for music downloaded from the Internet. Sixty-nine percent of all respondents agree that rights owners should receive payments from the copyrighted material that people download from the Internet, while 27% disagree. Additional statistical analyses show no significant differences in attitudes between MP3 users and non-users.



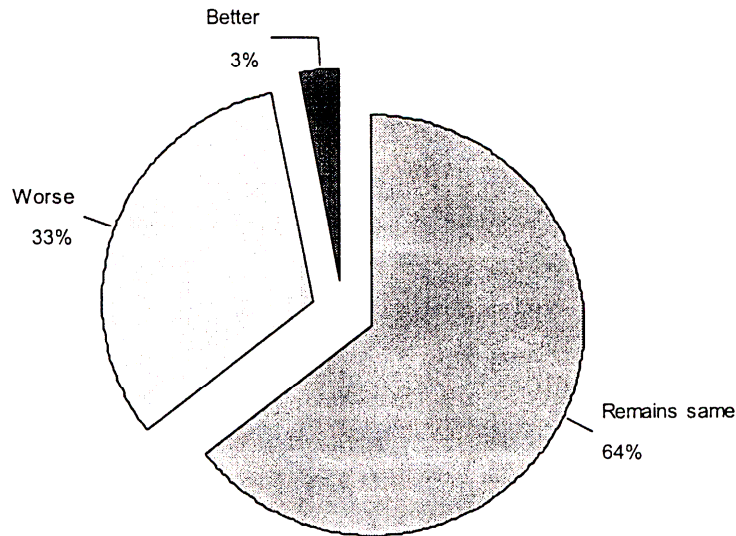
Should copyright holders receive payments from Internet downloads?

20) Fifty-four percent of students surveyed *disagree* with USC's ban on Napster downloads. Seventy-five percent of all respondents were aware of USC's ban on MP3 downloads from Napster. Of these, 54% disagree with the ban. Additional statistical analyses show no significant differences in attitudes between MP3 users and non-users.



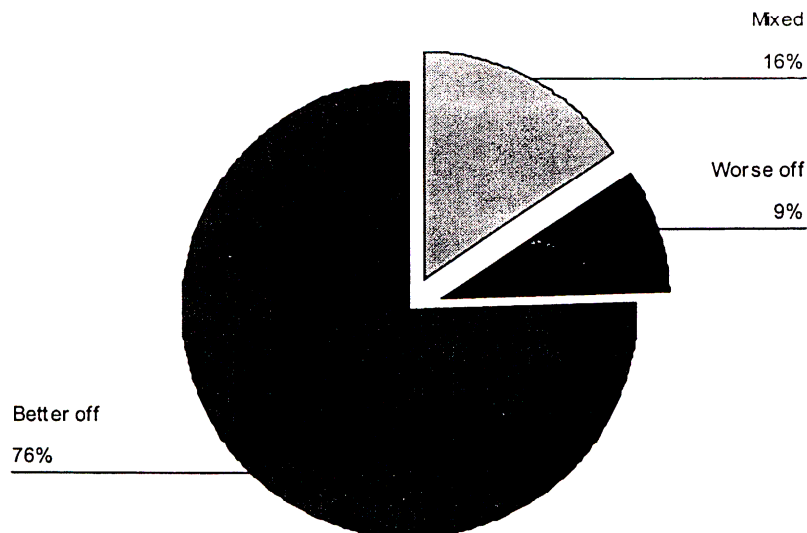
Attitude towards USC ban on Napster downloads...

21) Since Metallica's lawsuit, 33% of respondents say their opinion of the band has worsened; 64% say their opinion is unchanged. Of all students interviewed, 75% were aware of Metallica's lawsuit against Napster and USC. Of these respondents, 33% say their opinion of Metallica has changed for the worse since the lawsuit, while 64% say their opinion of the band has remained the same.



What is your opinion of Metallica after lawsuit?

22) Seventy-six percent of all students surveyed feel that society is better off with new technologies like MP3.



Is society better or worse off due to technologies like MP3?